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YOUNG & THOMPSON  
745 SOUTH 23RD STREET  
2ND FLOOR  
ARLINGTON, VA 22202

EXAMINER
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PIERRE, MYRIAM

ART UNIT	PAPER NUMBER
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2654

DATE MAILED: 07/29/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

09/701,069

Applicant(s)

BECKS ET AL

Examiner

Myriam Pierre

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 09/10/2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1, 2, 4-6 and 8-16 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-2, 4-6, 8-16 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 27 November 2000 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_ 11/10
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

## **DETAILED ACTION**

### **Response to Amendment**

1. Applicant's Amendment filed 12/10/2004, responding to the OA of 09/10/2004. Applicant's amended specification, amended claims 1, 9-10; canceled claims 3 and 7; and added new claim 16.

### **Response to Arguments**

2. The applicant's arguments have been fully considered and the applicant's arguments are not persuasive for the following reasons:

Applicant argues that Franz does not teach one of said rules (first language rule) is updated (stored) on the basis of equivalent segment (translation or match) input by the user from the user interface (apparatus that displays text). However, Franz does teach storing, which imply updating, an artisan with ordinary skill in the art would realize that it would imply updating, and updating implies that that the rules are processed in real time, or after the user inputs the information (stores translation example data made up of examples in clause units expressed in the first language (first rule) and corresponding second language page 7 line 10-13; apparatus that displays text, apparatus that displays text).

### ***Claim Rejections - 35 USC § 102***

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

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(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claims 1, 10 and 16 are rejected under 35 U.S.C. 102(b) as being anticipated by Franz et al. (EP 805403 A2).

As to claims 1 and 10, Franz teaches  
a method for machine translation of information given a character string in a first  
language into a character string in a second language, comprising the steps of:  
storing, in a knowledge database, a first language character string model segments  
(store first language sentence clause, page 7 line 10-13; sentence clause  
inherently includes string model segments), and storing second language model  
segments (example stored, which includes clause units) in logical connection  
(corresponding) with the first language character strings (clause units) (stores  
translation example data made up of examples in clause units expressed in the  
first language and corresponding second language, page 7 lines 14-17; clause  
units inherently include model character strings), the second language model  
segments inherently being second language character strings.  
Identifying a structural segment in the character string of said first language following a  
first rule (Sentence structure is structural segment of a sentence, character  
words (or strings) of first language, uses first rule (dividing/division pattern) 1<sup>st</sup>  
language divided into syntax units or sentence structure, page 2, line 23, page 5,  
lines 22-26, and page 7, lines 4-7 and 11);  
comparing identified structural segment with model segments in the form of character

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strings in the first language stored according to a second rule (Sentence structural is structural segment, model segment are examples that are stored in memory of translations, character strings or character words, second rule (detecting collation of 1<sup>st</sup> language to examples that are stored as phrase units), page 5, lines 27-32, page 8, lines 54 and 56, and page 9 lines 43 and 46);

striving to select one model segment on the basis of said comparison (Model segments are examples stored in memory, "translating means" chooses/selects the best example or model segment that best fits 1<sup>st</sup> language, page 5, lines 27-32);

reading a model in the form of a character string in the second language logically connected to the selected model segment (Example or model, recognizes/reads character words in second language to connect best matched examples, or model segment, page 5, lines 31-32);

translating structural segment into translation segment in the form of a character string in the second language on the basis of said equivalent segment and a third rule (Translating means translates sentence structure, or structural segment, into translation segment, or syntax units, from character words (strings) in second language, and third rule or clause pattern syntax, calculations to find 'example' corresponding to the 1<sup>st</sup> language matches 2<sup>nd</sup> language, page 5, lines 38-42, and page 9, lines 16 and 18);

identification of an intermediate word and/or a suffix and said first rule is essentially based on the identification of intermediate word and/or suffix (Syntax analyzing processing part are parts of speech that uses morpheme information –suffix or

parts of words- and first rule (dividing), page 7, lines 51-52 and page 5, lines 22-26).

following a first rule, identifying a first structural segment in a first language character string (Fig. 5, converting part, element 6, simple syntax analyzing part identifies, on the basis of morpheme information, page 7 lines 18-22);

following a second rule, comparing the first structural segment with the stored first language character string model segments (inputting part, detects word, first language sentence, part of speech and morpheme analysis, page 6 lines 36-39; the inputting part follows a rule of comparing the language structure, which is part of the example stored, segmenting the first language into model segments (example stored), such as part of speech and morpheme analysis);

selecting (the selecting part necessarily includes reading, as a translation segment, a stored second language model segment previously been logically connected to the selected one first language character string model segment) one stored first language character string model segment (first language sentence) that has previously been logically connected (matching any of the examples stored) to the selected one first language character string model segment (clause division pattern)(clause dividing part determines whether or not there is in the first language sentence clause matching any of the examples stored in a clause division pattern translation example memory, page 6 lines 58-59 and page 7 lines 1-3; first language sentence is an example stored);

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selecting (the selecting part necessarily includes reading, as a translation segment, a stored second language model segment previously been logically connected to the selected one first language character string model segment) one stored first language character string model segment (first language sentence) that has previously been logically connected (matching any of the examples stored) to the selected one first language character string model segment (clause division pattern)(clause dividing part determines whether or not there is in the first language sentence clause matching any of the examples stored in a clause division pattern translation example memory, page 6 lines 58-59 and page 7 lines 1-3; first language sentence is an example stored);

following a third rule, translating the first structural segment into said translation segment, the translation segment inherently being in the form of a character string in the second language (reads from the clause division pattern translation example memory, element 5, the translation corresponding to the example matching the clause used to divide up the first language sentence, page 7 lines 6-9; thus, the clause division pattern translates first structural segment, which is the based on the clause dividing part, element 4.);

the first rule comprises the identification of at least one of an intermediate word and a suffix (morpheme information, page 7 lines 18-20; the identification of the structure, the first rule, includes obtaining morpheme information),

the method comprises the identification of an intermediate word and/or a suffix and said

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first rule is essentially based on the identification of intermediate word and/or suffix (Syntax analyzing processing part are parts of speech that uses morpheme information –suffix or parts of words- and first rule (dividing), page 7, lines 51-52 and page 5, lines 22-26).

when following the second rule, no first language character model segment (clause) is found that matches the first structural segment (example stored inherently includes structural segments such as phrase and clause division of the translated language) (page 7 lines 10-14, no clause matching an example stored), when no model segment to be selected following the second rule is found as a result of the comparison of the structural segments, the structural segment is displayed by means of a user interface and the equivalent segment of the display structural

segment is stored in the knowledge base by means of the user interface (No example found, following second rule, collating syntax, stored in translation example memory, outputs into dividing part (deals with structural segment of sentence) using apparatus that displays text, data is analyzed using knowledge and rules, page 6, lines 26-27, lines 48-50 and page 2, line 34).

rules updated on the basis on output data from the user interface (Translation rules from input data, page 2, lines 25 and 33).

As to claim 2, Franz teaches

information to be given as a character string in the second language is generated basis

of translation segments and a fourth rule (Fourth rule, probability of translated examples that match first or original language, page 5, lines 47-51).

As to claim 4, Franz teaches structural segment comprises of a punctuation mark (See Fig 9C and page 26, line 12).

As to claim 5, Franz teaches type identifier of the model segment is stored in logical connection with the model segment (Uses "converting part" as a type identifier, which will select which kind of model or 'example' that is matched with 1<sup>st</sup> language input page 3, lines 18-20).

As to claim 6, Franz teaches, there are two model segments representing different languages logically connected to each other (Two model segments, examples and grammar used to find translation, both of those model segments use probability to match both languages, page 5 lines 51-53).

Claim 8 recites the same or similar limitations as claim 7, rejected above, and so claim 8 is rejected for the same reason above.

As to claim 9, Franz teaches,  
characterized in that the method further comprises steps of:  
reading the first information given as a character string in the first language (First language character recognized, page 2, line 23);  
translating the first information given as a character string in said first language on the basis of data in the knowledge base into first information given as a character string in the second language to the extent allowed by the data available in the knowledge base (First language sentence, character recognition, and second language having 1<sup>st</sup> language sentence translated based on knowledge and rule based on second language or translated language, page 2, lines 32-33);  
determining the additional data needed to complete the translation of the first information given as a character string in the first language into first information in the form of the character string in the second language (Searches examples to determine if there is match between the first language and the second language sentence (character words), page 2, line 44);  
feeding said additional data in the knowledge base to update the knowledge base (Examples, which are in second language, are stored if not found in memory, the 'examples' are feed into knowledge base or memory, page 2, lines 48-50 and 59);  
completing the translation of the first information given as a character string in the first language into first information given as a character string in the second language (Converting part supplies translation from search of unchanged words already

found in memory, which is the first information, to output as second language, page 3, lines 3-4),

storing said first information given in the second language (Store unchanged parts to translated word, page 2, lines 42-42 and 59 );

reading the second information given as a character string in the first language (Searches examples to determine if there is match between the first languages and the second language sentence (character words), page 2, line 44; searching the examples inherently includes reading),

translating the second information given as character string in the first language into second information given as a character string in the second language on the basis of said update data in the knowledge base (Second information, or examples (or thesaurus) that matches first language, is stored in knowledge base or memory, page 2, lines 5-6, 18-20).

As to claim 10, Franz teaches,

knowledge base means for storing model segments in the form of character strings in said first language, and in logical connection with these, equivalent segments in the form of character strings in the second language, and for storing a first, second, and third rule (Store parameters of 'example' or model segment, and matching it to stored second language, if not found, a probability of the word is performed and the new 'example' is stored in memory, page 2 line 42 and page 5, lines 49-50 ).

The rest of the limitations of claim 10 are rejected for the similar reasons in rejecting claim 1.

Claim 11 recites the same or similar limitations as claim 2, rejected above, and therefore claim 11 is rejected for the same reasons.

As to claim 12, Franz teaches,  
user interface means for connecting the user to said knowledge base means (text data is outputted, and uses knowledge base, page 2, line 21 and page 2, lines 26-27).

As to claim 14, Franz teaches,  
a first knowledge base and a second knowledge base so that specific users have access to first knowledge base means and only some of specific uses have access to second knowledge base means (first knowledge base is memory and second knowledge base is the thesaurus, user is able to find out the words which are in memory, but can access the thesaurus if necessary, page 7, lines 46-47 and page 8 lines 26-27).

As to claim 15, Franz teaches,  
a first knowledge base means and a second knowledge base means, selective transfer

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of data stored in said knowledge base to first knowledge base (first language, not necessary to store examples of all possible first sentences, the system is selective in what is stored, page 3, lines 41-45).

### ***Claim Rejections - 35 USC § 103***

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claim 13 is rejected under 35 U.S.C. 103(a) as being unpatentable over Franz (EP 805403 A2), as applied to claim 10, in further view of Brown et al. (5,768,603).

As to claim 13, Franz teaches forming character strings in the second language, and for storing a first, second, and third rule (page 7, lines 4-5, and 11, and page 9, lines 16, 43, and 45; in a user interface means, Franz teaches that when there is a match, then the translation is stored according to the following rules: first rule is division pattern, second rule is phrase translation, and third rule is clause pattern, all rules are stored).

Franz does not teach implementing a data transmission network.

However, Brown teaches a user interface means are connected to a knowledge base means over a data transmission network (User interact with translation device and

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receive document from translation system, then send the translation out on the external network, uses source transducers (stores source sentence in memory) as knowledge base, column 12, line 24-31 and column 13, lines 28-34).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the teachings of Brown et al. in the user interface of Franz, because, this would effectively enhance the user to receive a document from an external network, and thus, translate it into another language using the translation and then transmit the translation out on the external network, as taught by Brown, column 12 lines 21-31.

### Conclusion

3. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later

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than SIX MONTHS from the mailing date of this final action. using MIME and HTML standards.

4. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Richemond Dorvil can be reached on (571) 272-7602. The fax phone number for the organization where this application or proceeding is assigned is 571-272-8300.

7. Information as to the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

MP

06/10/2005



**VIJAY CHAWAN  
PRIMARY EXAMINER**